DC0000361

File

RE: Walter Reed Army Medical Center - NPDES Permit, Total Residual Chlorine Exceedance (UNCLASSIFIED)

Sodimu, John A Mr CTR US USA MEDCOM WRAMC to: Ingrid Hopkins, 11/05/2010 02:10 PM

Cc: "Chowdhury, Monir (DDOE)", "Delp, Anne H Ms CIV USA MEDCOM WRAMC", "Fromal, Joe Mr CIV USA MEDCOM WRAMC", "Medicus, Jessica D Ms CTR US USA MEDCOM WRAMC", "Schnars, Michael

1 attachment

Hach Colorimeter.pdf

Classification: UNCLASSIFIED
Caveats: NONE

Good Afternoon,

The Garrison Environmental Office (GEO) investigated potential sources of TRC in our storm sewer, but were unable to attribute our 3rd quarter exceedance to any source. The GEO reviewed the Instruction Manual (attached, pages 51 to 63) for the Hach Colorimeter that our contract lab used to measure low range TRC on the date of the exceedance, and noted that interfering substances (pH, bromine, iodine, ozone, manganese and chromium) in the sample can affect the TRC measurement. On the date of the TRC exceedance, the lab recorded a pH of 8.5 su, which the GEO feels affected the TRC measurement (0.1 mg/L). Our best conclusion is that the TRC measurement was influenced by the pH.

Since the September 24, 2010 TRC exceedance, our lab resampled on November 2, 2010, and recorded TRC and pH concentrations of 0.03 mg/L and 7.7 su, respectively.

Please contact me should you have any questions.

Regards,

John A. Sodimu
Water Program Manager
Total Environmental Concepts, Inc
Garrison Environmental Office
US Army Garrison Walter Reed
O: 202.782.7834
C: 202.277.5031

-----Original Message-----
From: Sodimu, John A Mr CTR US USA MEDCOM WRAMC
Sent: Friday, September 24, 2010 3:45 PM
To: 'Hopkins.Ingrid@epamail.epa.gov'; 'Ford.Nancy@epamail.epa.gov'
Cc: 'Chowdhury, Monir (DDOE)'; Delp, Anne H Ms CIV USA MEDCOM WRAMC; Fromal, Joe Mr CIV USA MEDCOM WRAMC; Medicus, Jessica D Ms CTR US USA MEDCOM WRAMC; Mbotiji, Julius N Mr CTR US USA MEDCOM WRAMC; Dyke, Ashby A Mr CIV USA MEDCOM WRAMC
Subject: Walter Reed Army Medical Center - NPDES Permit, Total Residual Chlorine Exceedance (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Good Afternoon,

This email serves as notification that Walter Reed Army Medical Center (WRAMC) recorded a total residual chlorine (TRC) concentration of 0.1 mg/L today, which is above the effluent limit (< 0.1 mg/L) specified in its NPDES Permit (DC0000361). WRAMC's analytical contractor, Microbac Laboratories, collected grab samples for WRAMC's quarterly compliance monitoring and recorded the elevated TRC concentration.

WRAMC will investigate the source(s) contributing to the elevated TRC concentration and provide an update on progress with the investigation in next month's quarterly DMR submission.

Please contact me should you have any questions.

Regards,

John A. Sodimu
Water Program Manager
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O: 202.782.7834
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RESPONSE TO PUBLIC COMMENTS
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
PERMIT ISSUANCE

DEPARTMENT OF THE ARMY
WALTER REED ARMY MEDICAL CENTER
WASHINGTON, DC
July 17, 2008

NPDES Permit Number: DC0000361

1. NOTICE OF PERMIT ISSUANCE

The United States Environmental Protection Agency, Region III (EPA) has made the decision to issue an individual National Pollutant Discharge Elimination System (NPDES) permit to the United States Department of the Army, Walter Reed Army Medical Center (WRAMC), to control discharges of industrial process water from Building 2, 6900 Georgia Avenue, NW, to the DC Municipal Separate Storm Water System (MS4), and thence to Rock Creek, Washington, DC. The requirements in this permit are based on the Clean Water Act (33 U.S.C. 1251 et seq.), hereinafter referred to as the Act, and NPDES regulations (40 CFR Parts 122, 124).

EPA originally published a draft permit for public comment on February 1, 2008. The changes in the permit address various comments received. EPA has prepared a Final Fact Sheet, which is incorporated herein by reference.

2. PERMITTING AUTHORITY

The NPDES permitting authority is: U.S. Environmental Protection Agency, Region III, NPDES Permits Branch (3WP41), 1650 Arch Street, Philadelphia, PA 19103. The permit writer is: Peter Weber (215) 814-5749, NPDES Permits Branch.

3. PERMITTEE

The permittee is: Department of the Army, Headquarters, U.S. Army Garrison, WRAMC, 6900 Georgia Avenue, NW, Washington, DC 20307-5001. The contact person is Joseph Fromal, Quality Assurance Evaluator, (202) 782-0090.

4. PUBLIC COMMENTS AND EPA RESPONSES

During the public comment period, from February 1, 2008 to March 1, 2008, EPA received two sets of comments: 1) from the District of Columbia District Department of the Environment (DDOE); and 2) from the proposed permittee, WRAMC.

a. District of Columbia DDOE comments and EPA responses.

DDOE public comments, in a February 28, 2008 email, made the following three specific comments.

1) Fact Sheet, Item #12, replace with the correct DC DDOE mailing address.

Response: Changed.

2) Reporting illicit discharges into the MS4 system at/from the WRAMC campus within 24 hours of occurrence.

Response: Part III.D.6 has been changed to add reporting of any noncompliance within 24 hours to both EPA and DDOE.

3) Determining source of illicit discharges into the MS4 system at/from the WRAMC campus, including not only Building 2 but other possible sources.

Response: Part IV.D. has been added to the permit, which is a request that the facility undertake a thorough investigation, and deliver a report within nine months to DC and EPA, of all WRAMC stormwater and sanitary sewer lines contributing to the lateral which serves Building 2 and discharges to the MS4 system. The results of this investigation are to determine whether there are any other unpermitted discharges to the MS4 in the contributing areas in the vicinity of Building 2.

In previous years, DC DDOE had discovered illicit discharges to the same MS4 line at its discharge to Rock Creek. These discharges might either be from wastewater or stormwater originating from other buildings on the Walter Reed campus, or from other sources upgradient or downgradient from Walter Reed. As a result of the study, the facility will be able to identify and verify the locations and connections to MS4 storm sewer lines, and to characterize the discharges to these lines. This investigation shall determine conditions upgradient and downgradient of Building 2. The District of Columbia Water Pollution Control Act (WPCA), at §8-103.06(d), indicates that prior to DC certification of this NPDES permit, the District of Columbia "may require the person seeking the permit or certification to perform studies to ensure conformance with this subchapter" of the WPCA.

b. Walter Reed Army Medical Center comments and EPA responses.

WRAMC comments, in a February 20, 2008 email, made the following eight specific comments. Among these comments, WRAMC requested monitoring without limits for Total Residual Chlorine, questioned the rationale for other monitoring parameters and frequencies, and requested clarification of the precise location of Outfall 001.

1) Cover sheet, specify that the discharge would be authorized from Building 2, instead of from "a facility located at WRAMC."

Response: Changed.

2) Cover sheet, indicate that the discharge to receiving waters would be via a DC MS4 storm sewer.

Response: Changed.

3) Part I.A., Effluent Limitations and Monitoring Requirements, clarify the location of Outfall 001.

Response: Outfall 001 and the monitoring point are established at Manhole 167, located to the south of Building 2, which is the lateral line which feeds into the DC MS4 trunk line. This manhole provides access to discharges from Building 2 at the juncture with the lateral, prior to reaching the MS4 trunkline. All parameters are sampled here except for Total Residual Chlorine, which is sampled downgradient at Manhole 166. Under 40 CFR 122.48 (b), NPDES permits shall specify monitoring of "type, intervals, and frequency to yield data which are representative of the monitored activity . . ." This location allows representative effluent samples to be collected, analyzed and reported.

The MS4 discharges are authorized as NPDES Permit Number DC0000221, and the discharges from Building 2 into the MS4 must meet the requirements of the MS4 permit. The DC WPCA provisions, at §8-103.07, also establish requirements for determining discharge locations in situations where the District of Columbia's Municipal Separate Storm Sewer System (MS4) permit, NPDES Permit No. DC0000221 receives industrial process water discharges. Subsection (a) states "[w]hile pollution from point sources into storm sewers shall be considered discharges into District waters, the location of the discharge of the storm sewer wastewater into the waters of the District or other jurisdictions shall be the location of the discharge for any permit issued." The monitoring and outfall location have thus been established at a location prior to the release of the Building 2 industrial process water and stormwater into the MS4.

For the above reason, the outfall cannot be established at Rock Creek, which is the ultimate location of both the WRAMC and MS4 discharges for this sewer line.

4) Part I.A., monitoring and reporting frequency. The draft permit, Part I.A. footnote 1, was not consistent with the monitoring table, since the footnote referred to reporting "once every two months."

Response: Changed. Furthermore, the monitoring has been reduced to quarterly for TRC, Oil and Grease, and pH; and semiannual for the other parameters. These frequencies are based on the nature of the discharge, which is noncontact cooling and heating water.

5) Part I.A., request that the total residual chlorine (TRC) parameter to be monitor only, without a no-detection requirement.

Response: The TRC parameter is a DC water quality criterion, with a maximum allowable concentration of 19 ug/l. DC permits have a standard no-detection level requirement, set at <0.1 mg/l, to be protective of water quality. Because the WRAMC discharge is to the DC MS4 line, the discharge is required to comply with DC requirements established for the MS4. Based on the DC WPCA, at §8-103.07(b), "[e]xcept for loss of heat, no reduction of pollutants in the discharged wastewater while flowing in the storm sewer will be recognized." Because of these DC requirements, TRC needs to be monitored with a detection requirement.

6) Part I.A., request that metals monitoring be for a limited time only.

Response: These parameters are listed in the Rock Creek Metals TMDL, and monitoring semiannually over the five-year term of the permit will provide enough representative samples to determine whether these parameters are found in the effluent from the Building 2 operations, per 40 CFR §122.48.

7) Part I.A., question whether to have a BOD5 monitoring limit.

Response: The application for permit, EPA Form 2C, included just one sample of BOD5. Because this permit is intended to characterize what is in the effluent, and this parameter was detected, it is essential to include monitoring of BOD5.

8) Part II.C., flow measurement

Response: This is standard permit language and would apply if flow measurement would ever be determined other than by "estimated" flow.